Claims

1. Device for monitoring a conveyor (1), comprising:

- a conveyor belt (2) made of elastomer material, having a carrying side (3) for the goods to be conveyed, and a running side (4), whereby the conveyor belt has, in particular, an embedded strength support;

- an optoelectronic system (5) that optically detects the carrying side (3) and/or the running side (4), particularly the carrying side, in that it recognizes damage during operation, and if a critical state of the conveyor belt is reached, triggers an acoustical and/or optical alarm (11) and/or, in particular, brings about an automatic shut-down of the system;

- a process computer (6), which is coupled with the optoelectronic system (5), for the purpose of evaluating all of the data, whereby the process computer is connected with the alarm (11) and/or a drive control (12); as well as

- other system parts, namely contact drums (8), support rollers (9), support scaffolding, as well as any other components that might be necessary;

characterized in that the device is additionally equipped with at least one structure-borne noise sensor (10) that detects deviations from the reference frequency, whereby a process computer (6) that is connected with the structure-borne noise sensor evaluates the change in frequency, specifically with simultaneous balancing with the reports from the optoelectronic system (5), so that even in a case where the optoelectronic system itself does not report a critical state, an acoustical and/or optical alarm and/or in particular, an automatic shut-down of the conveyor is brought about, in that the process computer responsible for the structure-borne noise sensor is also connected with an alarm (11) and/or the drive control (12).

2. Device according to claim 1, characterized in that the structure-borne noise sensor (10) is disposed in the vicinity of the optoelectronic system (5).

3. Device according to claim 1 or 2, characterized in that the structure-borne noise sensor (10) is anchored in a bore of a

contact drum (8) and/or support rollers (9), with a non-positive lock.

4. Device according to claim 3, characterized in that the bore is disposed within the center point of the contact drum (8) and/or support rollers (9).

5. Device according to claim 3 or 4, characterized in that the structure-borne noise sensor (10) is anchored in a bore of reversing drum (8) and/or deflection drum.

6. Device according to one of claims 1 to 5, characterized in that the structure-borne noise sensor (10) consists of piezoceramic.

7. Device according to one of claims 1 to 6, particularly in combination with claim 5, characterized in that the structure-borne noise sensor (10) is configured in multiple layers.

8. Device according to one of claims 1 to 7, characterized in that the process computer for the optoelectronic system (5) and the process computer for the structure-borne noise sensor (10) is a process computer unit (6).

9. Device according to one of claims 1 to 8, characterized in that the alarm for the optoelectronic system (5) and the alarm for the structure-borne noise sensor (10) is an alarm unit (11).